

APPARATUS AND METHOD FOR CONSERVING MEMORY  
IN A FINE GRANULARITY SCALABILITY CODING SYSTEM

## ABSTRACT OF THE DISCLOSURE

5       Decoding time stamps (DTSSs) and presentation time  
stamps (PTSSs) are used in fine granularity scalability  
(FGS) coding during MPEG-4 video coding. An input video is  
encoded in an FGS encoder into a base layer bitstream and  
an enhancement bitstream. The bitstreams are provided over  
10 a variable bandwidth channel to an FGS decoder. The DTSSs  
and the PTSSs are selected during encoding as to conserve  
memory during FGS decoding. The video object planes (VOP)  
in the bitstreams include base VOPs and FGS VOPs, and may  
also include fine granularity temporal scalability (FGST)  
15 VOPs. The FGS VOPs and the FGST VOPs may be organized in  
the same layer or in different layers. The base VOPs are  
combined with the FGS VOPs and the FGST VOPs to generate  
enhanced VOPs.